POLITICAL DECISION PROCESSES, TRANSPORTATION INVESTMENT AND CHANGES IN URBAN LAND USE: A SELECTIVE BIBLIOGRAPHY WITH PARTICULAR REFERENCE TO AIRPORTS AND HIGHWAYS

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DEPARTMENT OF TRANSPORTATION
OFFICE OF UNIVERSITY RESEARCH
WASHINGTON, D.C. 20590

The University of Texas at Austin
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NOTICE

This document is disseminated under the sponsorship of the Department of Transportation, Office of University Research, in the interest of information exchange. The United States Government, and the University of Texas assume no liability for its contents or use thereof.
The purpose of this Bibliography is to assist with the revision and extension of intra-urban location theory, so as to explain and predict how decisionmaking by different persons and groups affects change in intra-urban land use. Special attention is paid to the generation and resolution of conflicts over urban land in the vicinity of new transportation facilities. In particular the Bibliography focuses on new airports on rural-urban fringes and the conflicts generated between politicians, citizens' and business groups, and planners over land use in their vicinity. Existing literature is sparse on this topic.
EXECUTIVE SUMMARY

INTRODUCTION

In recent years, there has been a decline of interest in aggregate models of urban growth and land use. Such models attempt to describe or predict the locations of categories of activity at the metropolitan or citywide scale, and most fail to fit real-world situations well. This obviously limits the current ability of policy makers to understand urban growth processes and to prescribe for them.

One reason for the failure of traditional models is that they rest on unrealistic assumptions about the nature of decisionmaking. For example, in classical urban land-use-land-rent models, following Hurd and Alonso, human beings are governed in their decisionmaking by the desire to maximize money profits. They are also endowed with perfect knowledge about all past and future events which could bear on their calculations.

The desire to produce models without such unrealistic assumptions has led to attempts to identify real-world decision processes, and to suggest how they influence location decisions and hence the shaping of urban land use and growth. Thus, Brown and Moore in 1967 published a paper attempting to relate decisions by individuals about housing to the development of residential areas of different kinds within the city. In 1969 and 1973, work by Cox and Golledge and Briggs suggested that the explanation and prediction of the location of

all kinds of activity should be approached this way. This work clearly shifts attention from macro-to-micro scale studies of urban areas, as also endorsed by Lee. 7

To date, however, no mathematical, deductive analytical models have appeared to show how realworld decision processes create urban land use change in even small sections of the city.

PROBLEM STUDIED

This Bibliography has therefore been compiled to assist with the task of defining better models, as suggested above. Its emphasis is on literature which identifies the interests and values of different individuals and groups, and which traces how clashes between differing persons lead finally to decisions about the use of urban sites. Since conflicts between different parties and their resolution are political in nature - in the broad sense of political, that is, primarily affected by group or individual power - urban land use or activity location decisionmaking is here itself categorized as political. 8 Special attention is paid to the effects of transportation investment on such political decisionmaking concerning the use of urban land. This is because it is now well-known that urban land use decisions are highly dependent on decisions about transportation.

In sum, therefore, this Bibliography is primarily concerned with small-scale studies of how political decision processes might result in the transformation of land from one use to another.

7. D. Lee, op. cit.
8. See discussions of intra-urban locational decisions as political processes in this sense in:

K. Cox, Conflict, Power and Politics in the City: A Geographic View, New York, 1973, and

RESULTS ACHIEVED

Part I focuses on urban political decision processes in general, in Sections 1.1 to 1.3. However, three specific kinds of processes are also identified from the literature. They are: (1) decisionmaking by voters, politicians and political parties, (administrative, Section 1.4), (2) decisionmaking by citizen's pressure groups (citizens' participation, Section 1.5) and (3) decisionmaking by civil servants, especially planners (bureaucratic decisionmaking, Section 1.6). Very little of the literature on any of these topics has yet linked decision processes with urban land use change, even in verbal form.

Part II of the Bibliography focuses on how transportation investment, especially, might affect decisionmaking and urban growth. Most of the pertinent literature is concerned with highways (Section 2.3). However, this could comprise a useful source of concepts and methods to transfer to the study of the effects of transportation investment in general, and other modes of transportation in particular. Especially, studies of the effects of airport investment might be made, since Section 2.2 of the Bibliography suggests that these effects are among the less-well known, and may be extremely important. Federal or State governments in the U.S.A. and elsewhere have recently begun to subsidize airports at high levels of investment in rural-urban areas, as part of national airport networks. (For example, the new Dallas-Fort Worth airport, Texas, U.S.A., covers 16,950 acres and is expected to cost several billion dollars by 1990.

obviously, although this Bibliography has been compiled from a number or sources, many references may have been inadvertently omitted. References on traditional urban land use theory, urban land use planning and transportation planning have been consciously omitted: they are already covered in a number of Bibliographies, and they do not emphasize the relationships between political decisionmaking, as defined herein, and urban growth.
UTILIZATION OF RESULTS

This Bibliography has been published by the Council for Planning Librarians, Exchange Bibliography Series. It is apparently being used by all levels of researchers and practitioners in their attempts to find literature, techniques, etc. which will help them deal with the difficult problem of relating political decisionmaking to urban growth.

CONCLUSION

The purpose of this Bibliography is to assist with the revision and extension of intra-urban location theory, in order to explain and predict how decisionmaking by different persons and groups affects change in intra-urban land use. Special attention is paid to the generation and resolution of conflicts over urban land in the vicinity of new transportation facilities. In particular, the Bibliography focuses on new airports on rural-urban fringes, and the conflicts generated between politicians, citizens' and business groups, and planners over land use in their vicinity. Existing literature is sparse on this topic.
In recent years, there has been a decline of interest in aggregative models of urban growth and land use. Such models attempt to describe or predict the locations of categories of activity at the metropolitan or citywide scale\textsuperscript{1}, and most fail to fit realworld situations well.\textsuperscript{2} This obviously limits the current ability of policy makers to understand urban growth processes and to prescribe for them.

One reason for the failure of traditional models is that they rest on unrealistic assumptions about the nature of decisionmaking. For example, in classical urban land-use-land-rent models, following Hurd\textsuperscript{3} and Alonso\textsuperscript{4}, human beings are governed in their decisionmaking by the desire to maximize money profits. They are also endowed with perfect knowledge about all past and future events which could bear on their calculations.

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\begin{enumerate}
\item For example, W. Alonso, Location and Land Use. Toward a General Theory of Land Rent, Honolulu, 1966.
\item Many of the reasons for this are reviewed in D. Lee, "Requiem for Large-Scale Models," \textit{Journal of the American Institute of Planners}, 39, 1973, 163-178.
\item R.M. Hurd, \textit{Principles of City Land Values}, New York, 1903.
\item Alonso, op. cit.
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Pat Burnett
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The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the document. The contents do not necessarily reflect the official views or policies of the Department of Transportation. This report does not constitute a standard, specification or regulation.
ABSTRACT

The purpose of this Bibliography is to assist with the revision and extension of intra-urban location theory, in order to explain and predict how decisionmaking by different persons and groups affects change in intra-urban land use. Special attention is paid to the generation and resolution of conflicts over urban land in the vicinity of new transportation facilities. In particular, the Bibliography focuses on new airports on rural-urban fringes, and the conflicts generated between politicians, citizens' and business groups, and planners over land use in their vicinity. Existing literature is sparse on this topic.
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1.2 Game Theory and Decision Processes


1.3 **Simulation of Decision Processes: Techniques and Case Studies**


1.4 Local Government


1.5 Citizen's Participation, Conflicts and Community Power Structure


1.6 Decisionmaking and the Bureaucracy


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